



CONCEPT NOTE

Accompanying Note to Draft Resolution for the 4th Session of the United Nations Environment Assembly of UNEP

Working title of resolution: “Geoengineering and its governance”

I Overall rationale for initiative

Geoengineering is a relatively new topic. Research defines it as a large-scale, intentional human intervention in the Earth’s climate system to alter the impacts of climate change. While definitions vary, geoengineering can be classified into two categories, carbon dioxide removal technologies and solar radiation management. From a science perspective, the potential costs and side effects of carbon removal technologies are now increasingly being researched but still need to be thoroughly understood. Almost no clear picture is available with regard to solar radiation management.

Geoengineering aims at limiting global temperature rise and other potentially damaging effects of climate change. At the same time, there is concern that the risks and the uncertainties of these technologies outweigh their potential benefits and could lead to a significant, not fully understood interference with the balance of the global ecosystem. This proposal is guided by these concerns, which we share.

Geoengineering technologies, in particular solar radiation management, and their impacts on the global ecosystem, on transboundary risks, costs or potential benefits are by far not yet fully understood. It is in the interest of the global community that the need for governance of geoengineering is addressed. Not in an effort to promote or facilitate its utilization, but to ensure that its potential implications are fully understood and unilateral utilization is prevented. As these technologies have planetary-scale consequences, their utilization can pose significant environmental and geopolitical risks and raise ethical and social questions. Our proposal to address the governance of geoengineering is motivated by a belief in the strength of multilateralism, preventing unilateral action to the detriment of all.

The recent Special Report of the Intergovernmental Panel on Climate Change (IPCC) on Global Warming of 1.5°C emphasizes the need for increased mitigation action. On this background, geoengineering technologies must not be seen as an alternative to mitigation, in the contrary, mitigation has to remain the core priority. Geoengineering has been discussed in the context of the Convention on Biological Diversity, the Montreal Protocol, the World Meteorological Organization, the London Protocol, and will be featured in UNEP’s upcoming Frontiers Report. The discussions have been limited to the particularities pertaining to the specific fora, not allowing for an overarching and/or thorough assessment of the issue.

II Policy options to address the issue

The objective of the resolution on geoengineering and its governance will be to mandate UNEP to prepare an assessment of geo-engineering and its governance. Given its core mandate to keep the environment under review, its environmental expertise and credibility and its trans-sectorial approach, UNEP is well placed to prepare such an assessment that will serve as the basis for further deliberations on the topic. We propose to set up a group of independent experts to support UNEP in this endeavor. The assessment shall inform decision makers on the status of science, provide an overview of actors and activities, report on potential impacts, including risks and benefits and uncertainties with regard to each geoengineering technology, and assess the possible needs and requirements of a governance system in the realm of geoengineering. An assessment will ultimately establish the basis for starting the discussions on the need and utility of various policy options on this issue.

III Relationship to the Programme of Work and Budget, adopted UNEA resolutions

a. *Mid-Term Strategy 2018-2021*

Subprogramme on "Environment under Review": Evidence-based policymaking informed by robust data and assessments fully integrates the environmental dimension of sustainable development, resulting in shared prosperity for all within the ecological limits of the planet.

Subprogramme on "Environmental Governance": Environmental issues are handled in an inclusive, sustainable and coherent manner, based on integrated policy and effective norms and institutions at all levels of governance.

Subprogramme on "Climate Change": Countries increasingly transition to low-emission economic development and enhance their adaptation and resilience to climate change.

b. *Programme of Work 2018-2019*

Subprogramme on "Environment under Review" (Achievement): Governments and other stakeholders use quality open environmental data, analyses and participatory processes that strengthen the science-policy interface to generate evidence-based environmental assessments, identify emerging issues and foster policy action.

Subprogramme on "Environmental Governance" (Objective): Policy coherence and strong legal and institutional frameworks increasingly achieve environmental goals in the context of sustainable development.

Subprogramme on "Climate Change" (Objective): Countries increasingly transition to low-emission economic development & enhance their adaptation and resilience to climate change.

c. *Adopted Resolutions*

United Nations Environment Assembly 1 (2014): "Science-policy interface" (1/4)

United Nations Environment Assembly 2 (2014): "Supporting the Paris Agreement (2/6)"

There have been discussions and decisions in other fora on the subject of geoengineering technologies. This will be accounted for in the resolution.

IV Assessment of possible financial requirements and implications

The operative paragraphs mainly target UNEP to fulfill a core mandate, i.e. to work on the science-policy interface. The financial requirements are following the budgets for similar requests where UNEP was tasked to develop a report and to collaborate with other entities.

V Main addressees of the initiative

The main addressee is UNEP for developing an assessment (*request*), other relevant UN entities are called upon to collaborate (*invite*), and the governments asked to nominate experts for the Expert Group (*invite*).